

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017997**Date Inspected:** 05-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Tian lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 3

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07244.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Longitudinal diaphragm sub assembly weld Components. Total number of welds UT Tested: 12 No's. The weld designations are review as follows:

1. SA3325-001-048~050,011~013,003,004,006,037,043,044.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07239.

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Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Longitudinal diaphragm sub assembly weld Components. Total number of welds MT Tested: 18 No's. The weld designations are review as follows:

1. SA3338-001-002,003,014,015,024~027,038,039,041,042,051,052,061,062,073,074.

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint FB3286-001-292. Welder is identified as 055491. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-U4b-F.

FCAW of weld joint FB3286-001-173. Welder is identified as 044830. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-U4b-F.

FCAW of weld joint FB3286-001-192. Welder is identified as 050242. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2233-TC-U4b-F.

FCAW Repair welding of weld joint FB3273-001-049. Welder is identified as 044830. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-FCM-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR16557. This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT-17404.

FCAW Tack welding of weld joint LD3043-001-059,060. Welder is identified as 208035. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

ZPMC personnel heat straightening OBG member is identified as RS3064C-001. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Zhang yaxu was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 9781.

During random in process inspection of OBG member identified as Lift 14 Floor beam FB3286A, this QA observed a cracked tack weld on weld joint identified as FB3286-001-114. This QA marked the cracked tack and informed ZPMC Quality Control (QC) indentified as Mr. Zhan hai feng of this issue. Mr. Zhan hai feng informed this QA that the cracked tack would be corrected in a manner compliant with the contract documents. Refer the attached photos for reference.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
